

Amendments to the Specification:

Please replace the Abstract with the following amended Abstract. The attached sheet includes an unmarked replacement copy of the Abstract.

A heat transfer regulating mixture is provided, the mixture having a metallic component A with a melting point T_A and a particulate ceramic component B which is non-wettable by the metallic component A, non-reactive therewith and which has a melting temperature T_B which is higher than both the temperature T_A and a desired operating temperature T_D which is also higher than T_A . The metallic component A and ~~[[the]]~~ their particulate ceramic component B and the respective amounts will typically be selected to have a higher thermal resistivity below T_A than above T_A . The heat transfer regulating mixture may be incorporated in a thermal flux regulator having the mixture within an enclosure surrounding a heat generating reactor structure.